Appl. No. 10/565,311 Amendment Dated February 22, 2010 Reply to Office action mailed November 24, 2009

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently amended): A membrane material for fabric structures having enhanced reversible thermal properties, said membrane material comprising a basic woven fabric which is coated continuously at least on one side with a polymeric compound consisting of an elastomeric material, at least one non-cross-linking phase change material and a cross-linking agent and whereby the phase change material is first melted into a liquid and mixed into a liquid component of the elastomeric material and than the cross-linking agent is added to the mixture which is applied to the basic woven fabric by knife coating and cured there, whereby the cross-linking agent cross-links the elastomeric material around the phase change material while in its liquid stage to incorporate the phase change material in the structure of the elastomeric material into the elastomeric structure and said membrane material becomes more translucent when the phase change material changes from its solid into its liquid stage during absorption of latent heat which also reduces the heat flux through the membrane material into the fabric structure.

Claim 2 (Cancelled)

Claim 3 (Previously presented): The membrane material according to claim 1, wherein the woven fabric is coated on both sides with the polymeric compound.

Claim 4 (Previously presented): The membrane material according to claim 1, wherein the woven fabric is coated on one side with the polymeric compound and no coating is applied to the other side of the fabric.

Claim 5 (Previously presented): The membrane material according to claim 1, wherein the woven fabric is coated on one side with the polymeric compound and is coated on the other side with a second polymeric compound which does not contain any phase change material.

Claim 6 (Previously presented): The membrane material according to claim 1, wherein the phase change material is a crystalline alkyl hydrocarbon.

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Claim 7 (Previously presented): The membrane material according to claim 1, wherein the phase change material is a salt hydrate.

Claim 8 (Previously presented): The membrane material according to claim 1, wherein the polymeric compound comprises a phase change material in a quantity of up to 60 wt.%, based on the total weight of the polymeric compound.

Claim 9 (Previously presented): The membrane material according to claim 1, wherein the phase change material has a melting point in the range between 30 °C and 50 °C.

Claim 10 (Previously presented): The membrane material according to claim 1, possessing a latent heat storage capacity of up to 150 kJ/m².

Claim 11 (Previously presented): The membrane material according to claim 1, wherein the polymeric compound contains flame-retarding additives.

Claim 12 (Previously presented): The membrane material according to claim 1, wherein translucency changes in connection with a phase transition of the phase change material.